



[7590-01-P]

NUCLEAR REGULATORY COMMISSION

10 CFR Part 72

[NRC-2012-0052]

RIN 3150-AJ12

**List of Approved Spent Fuel Storage Casks:
HI-STORM 100 Cask System; Amendment No. 9**

AGENCY: Nuclear Regulatory Commission.

ACTION: Direct final rule; confirmation of effective date.

SUMMARY: The U.S. Nuclear Regulatory Commission (NRC) is confirming the effective date of March 11, 2014, for the direct final rule that was published in the *Federal Register* on December 6, 2013, and corrected on December 26, 2013. This direct final rule amended the NRC's spent fuel storage regulations by revising the Holtec International HI-STORM 100 Cask System listing within the "List of Approved Spent Fuel Storage Casks" to include Amendment No. 9 to Certificate of Compliance (CoC) No. 1014.

DATE: The effective date of March 11, 2014, is confirmed for this direct final rule published on December 6, 2013, and corrected on December 26, 2013.

ADDRESSES: Please refer to Docket ID **NRC-2012-0052** when contacting the NRC about the availability of information for this direct final rule. You may access publicly-available information related to this direct final rule by any of the following methods:

- **Federal Rulemaking Web Site:** Go to <http://www.regulations.gov> and search for Docket ID **NRC-2012-0052**. Address questions about NRC dockets to Carol Gallagher; telephone: 301-287-3422; e-mail: Carol.Gallagher@nrc.gov. For technical questions, contact the individual listed in the FOR FURTHER INFORMATION CONTACT section of this document.

- **NRC's Agencywide Documents Access and Management System (ADAMS):**
You may access publicly available documents online in the NRC Library at <http://www.nrc.gov/reading-rm/adams.html>. To begin the search, select "ADAMS Public Documents" and then select "Begin Web-based ADAMS Search." For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1-800-397-4209, 301-415-4737, or by e-mail to pdr.resource@nrc.gov. The ADAMS accession number for each document referenced in this document (if that document is available in ADAMS) is provided the first time that a document is referenced.

- **NRC's PDR:** You may examine and purchase copies of public documents at the NRC's PDR, Room O1-F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

FOR FURTHER INFORMATION CONTACT: Naiem Tanious, Office of Federal and State Materials and Environmental Management Programs, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, telephone: 301-415-6103, e-mail: Naiem.Tanious@nrc.gov.

SUPPLEMENTARY INFORMATION:

I. Discussion.

On December 6, 2013 (78 FR 73379), the NRC published a direct final rule amending its

regulations at § 72.214 of Title 10 of the *Code of Federal Regulations* (10 CFR) by revising the Holtec International HI-STORM 100 Cask System listing within the “List of Approved Spent Fuel Storage Casks” to include Amendment No. 9 to CoC No. 1014. Amendment No. 9 broadens the subgrade requirements for the HI-STORM 100U part of the HI-STORM 100 Cask System and updates the thermal model and methodology for the HI-TRAC transfer cask from a two-dimensional thermal-hydraulic model to a more accurate three-dimensional model. The amendment also makes editorial corrections.

On December 26, 2013 (78 FR 78165), the NRC published a document that corrected several ADAMS accession numbers referenced in the December 6, 2013, direct final rule and delayed the effective date of the rule from February 19, 2014, to March 11, 2014. The NRC also published on December 26, 2013 (78 FR 78285), a document that corrected several ADAMS accession numbers referenced in the December 6, 2013, companion proposed rule and extended the public comment period from January 6, 2014, to January 27, 2014.

II. Public Comments on the Companion Proposed Rule.

In the corrected direct final rule, the NRC stated that if no significant adverse comments were received, the direct final rule would become effective on March 11, 2014.

The NRC received one comment on this amendment, which stated that, “[f]uels with a burn-up above 45 GWd/tU cause previously unforeseen safety problems and would break existing NRC safety rules...unless changes are made to the way fuel elements are packaged.” The comment raised general concerns with high burn-up spent fuel indicating that issues associated with high burn-up fuel have been “ignored and remedial action defunded” and that “...the NRC has insufficient data to support a licensing position on high burn-up cask storage.” The public comment is available in ADAMS under Accession No. ML14028A518.

The NRC staff reviewed this comment and concluded that this comment is not a significant adverse comment as defined in NUREG-BR-0053, Revision 6, "United States Nuclear Regulatory Commission Regulations Handbook" (hereinafter "Regulations Handbook") (ADAMS Accession No. ML052720461), as it is beyond the scope of this rulemaking. Instead, this comment raises a generic concern regarding the safety of high burn-up fuel and its storage in spent fuel storage casks, and is not specific to any issue or concern with the amendment to the cask certificate that is the subject of this rulemaking. The ability of the HI-STORM 100 Cask System to store high burn-up fuel for 20 years was authorized in a prior amendment, Amendment No. 1. The final rule approving that amendment was published in the *Federal Register* on July 15, 2002 (67 FR 46369). This current amendment, Amendment No. 9, does not change that prior authorization, nor does this comment raise any other issue specific to the amendment in question.

Moreover, even if the comment were determined to be in scope, it is not a "significant" comment as defined in the Regulations Handbook in that the comment does not present any new or significant information that warrants a substantive response in this notice and comment process. The general information cited by the commenter is not substantive enough to aid the NRC in understanding any impact upon the NRC's safety review, the technical specifications, or the NRC's conclusions of this particular amendment.

Furthermore, the commenter's references to presentations regarding the storage of high burn-up fuel involve ongoing efforts to study high burn-up fuel for periods well beyond 20 years. However, Amendment No. 1, the prior amendment that authorized the storage of high burn-up fuel in the HI-STORM 100 Cask System, only authorized storage for 20 years and not beyond. The current amendment in question, Amendment No. 9, is also limited in term for a period of 20 years. The staff is considering this issue in our review of storage license and certificate renewal

applications. The NRC is actively working with the U.S. Department of Energy (DOE), DOE scientific laboratories, and the industry, to perform additional testing and evaluation of the integrity of high burn-up fuel when stored for periods well beyond 20 years. The NRC expects that research, including cask demonstrations, cladding failure consequence analyses, vibration testing, and fuel rod bend tests, will provide more cladding material properties data regarding the storage of high burn-up fuel for extended periods. The NRC expects to garner information in this area over the next 5 years, and will use this information to assess the ongoing storage of high burn-up fuel for extended periods well beyond 20 years.

The NRC staff has concluded that there would be no significant environmental impacts as confirmed in Section VII, "Finding of No Significant Environmental Impact: Availability," of the direct final rule. This comment does not challenge that finding because, as the Environmental Assessment explained, this amendment to the rule will not result in any significant change in the types or significant revisions in the amounts of any effluent released, no significant increase in the individual or cumulative radiation exposure, and no significant increase in the potential for or consequences from radiological accidents. This amendment continues to ensure that the Commission's regulations regarding dose rates, found in 10 CFR part 20, are maintained.

A challenge to those dose rates, or the method by which the Commission establishes those dose rates, would be most appropriately addressed as a petition for rulemaking pursuant to 10 CFR 2.802. Therefore, this rule will become effective as scheduled.

Dated at Rockville, Maryland, this 28th day of February 2014.

For the Nuclear Regulatory Commission.

Cindy Bladey, Chief,
Rules, Announcements, and Directives Branch,
Division of Administrative Services,

Office of Administration.

[FR Doc. 2014-04837 Filed 03/04/2014 at 8:45 am;

Publication Date: 03/05/2014]